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A Field Experience in Public Health Nutrition with the Nutrition Section of the Florida Division of Health

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I am submitting herewith a thesis written by Mary Beth Lawler entitled "A Field Experience in Public Health Nutrition with the Nutrition Section of the Florida Division of Health." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Daniel W. Hubbard, Major Professor

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Accepted for the Council:

Carolyn R. Hodges

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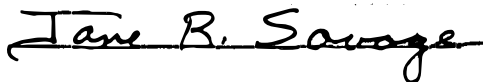
October 31, 1973

To the Graduate Council:

I am submitting herewith a thesis written by Mary Beth Lawler entitled "A Field Experience in Public Health Nutrition with the Nutrition Section of the Florida Division of Health." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.



Major Professor

We have read this thesis and
recommend its acceptance:





Accepted for the Council:


Vice Chancellor for
Graduate Studies and Research

A FIELD EXPERIENCE IN PUBLIC HEALTH NUTRITION WITH THE NUTRITION
SECTION OF THE FLORIDA DIVISION OF HEALTH

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Mary Beth Lawler

December 1973

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M.B.L.

ABSTRACT

A description and analysis of a field experience in Public Health Nutrition with the Nutrition Section of the Florida Division of Health is presented in this thesis. The field experience was designed to provide an opportunity for the blending of academic knowledge with practical application in work situations.

An increased understanding of the total public health organization was achieved through conferences and interviews with public health professionals. The majority of the field experience was spent with the Migrant Project Nutrition Coordinator in a six county region in south central Florida. This opportunity afforded a chance for increased development of skills in working with special minority groups such as the migrant farm workers.

The entire field experience showed the student that flexibility, cooperation, planning, and evaluation are key principles in public health. Through observation and participation in a variety of roles of the public health nutritionist, the student increased her skills in the areas of consultation, education, and counseling. The applying of public health principles as a nutritionist in the community reinforced the student's belief that her choice to pursue a career in public health nutrition was a wise one.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. THE STATE OF FLORIDA	5
Geography	5
Economy	6
Population	7
Vital Statistics	7
III. DEVELOPMENT OF FLORIDA'S PUBLIC HEALTH PROGRAM	12
History	12
Organization	14
Bureau of Adult Health and Chronic Diseases	14
Bureau of Health Facilities	16
Bureau of Local Health Services	17
Migrant Health Project	17
Sanitation Section	19
Bureau of Maternal Health and Family Planning	19
Bureau of Dental Health	20
Child Health Section	20
Public Health Nursing Section	20
Health Education Section	21
Nutrition Section	22
History	22
Objectives	22

CHAPTER	PAGE
Organization	23
IV. ANALYSIS OF ABILITIES THROUGH OBSERVATION AND	
PARTICIPATION	27
Consultation	27
Education	29
Counseling	32
Group Classes for Older Adults	34
Background	34
Planning	35
Development	38
Participation	41
Evaluation	42
V. SUMMARY AND EVALUATION	45
LITERATURE CITED	47
VITA	50

LIST OF TABLES

TABLE	PAGE
1. The Resident Birth, Crude Death Rates per 1,000 Population, and Infant Death Rate Per 1,000 Live Births, by Race, for the United States, Florida, and the six County Region in 1971	9
2. Rank Order Listing of the ten Leading Causes of Death in in the United States, Florida, and the six County Region in 1971 ,	10

LIST OF FIGURES

FIGURE	PAGE
1. State of Florida	3
2. Department of Health and Rehabilitative Services (HRS) Organizational Chart	13
3. Organization Chart of the Division of Health	15

CHAPTER I

INTRODUCTION

The field experience in Public Health Nutrition provides an opportunity for the student nutritionist to blend academic knowledge with practical application and subsequently to achieve a clearer understanding of the role of the nutritionist in public health. With a proper balance of theory and practice, the ability to develop a personal philosophy concerning the many dimensions of public health and the role of the nutritionist in relation to the other disciplines in the field can be achieved.

Objectives which reflected the previous academic training and work experience and which were designed to broaden an understanding of total health services were developed for the field experience... The objectives for the field experience were as follows:

1. To develop a greater awareness of the mechanisms involved with nutrition program planning and evaluation.
2. To increase the student's knowledge of the administrative hierarchy of a state division of health and its nutrition component.
3. To develop a greater understanding and appreciation of the many diverse roles of the public health nutritionist at state, regional, and local levels.

Florida was selected as the site for the eight week field experience because of the organized and effective Division of Health, and more specifically the Nutrition Section which functions in the state. The major part of the field experience was spent in a six county region in southern Florida--including Broward, Collier, Glades, Hendry, Lee, and Sarasota counties. A large number of the state's 100,000 migrants - including Blacks, Spanish-Americans, Puerto Ricans, and whites - reside in these counties. Mrs. Patricia Berry, under whose supervision the student worked, serves as State Migrant Project Nutrition Coordinator and Regional Nutrition Consultant. A map of Florida showing the six county region studied during the field experience is shown in Figure 1.

The region was specifically chosen to help build on past experience working with migrants as well as to provide new opportunities to work with other groups, especially the older adults who have retired to the area.

The geography, economy, population, and vital statistics of Florida are described in Chapter II of the thesis.

Chapter III briefly traces the history of public health in Florida and provides an overview of the Division of Health, the component bureaus and sections, their functions, and the relation of nutrition to each of these units. The Nutrition Section is discussed in detail. Included is a brief history of the section, basic objectives, and organization at the state, regional, and local levels.

Chapter IV contains an analysis of services participated in during the field experience. The student's reactions to her observations and

STATE OF FLORIDA



Legend: ///=Project Counties

Figure 1. State of Florida.

experiences are described in Part I. Part II includes a discussion of a specific activity participated in during the field experience. This activity consisted of developing and teaching two nutrition classes for a group of older adults.

CHAPTER II

THE STATE OF FLORIDA

The primary consideration in planning effective public health programs is the assessment of needs of the population to be served. A partial determination of these needs can be made by examining the geographical, cultural, economic, and demographic characteristics of the area. A careful analysis of these characteristics coupled with related health statistics establishes the needs of the population and subsequently helps to determine priorities for public health program development.

I. GEOGRAPHY

Florida is the southernmost state in the continental United States. Topographical regions include the coastal lowlands which attract many tourists, the Marianna lowlands, the Tallahassee hills, and the central highlands or ridge of the peninsula proper (1). Water is one of the state's major resources and Lake Okeechobee is the second largest fresh water lake entirely within one state in the United States (2).

Florida's mild climate is probably its greatest natural resource. Mean annual temperatures are 50 and 80 degrees in January and July respectively. The average annual rainfall is 50-65 inches which falls primarily June through September (2). Florida has been called the

"Sunshine State" because it has more sunshine than any state East of the Mississippi. This is one of the primary reasons for the great influx of tourists and elderly people seeking retirement into the state (1).

II. ECONOMY

Tourism is the largest income-producing business in the state. This industry has expanded rapidly since the early 1900's. In 1927 about 1,800,000 visitors spent approximately \$201,000,000. Today these figures have jumped to more than 23,150,000 visitors spending some \$3.6 billion annually in Florida (1,2).

Another important industry is agriculture. Florida produces 80% of the nation's citrus fruits; 1971 output of oranges was an estimated 6,404,000 tons, and the grapefruit output was 1,824,000 tons. Florida also ranks second only to California in the production of fresh vegetables. It also produces avocados, watermelons, limes, tangerines, sugarcane, peanuts, cotton, and tobacco. The cattle industry has grown in importance. Crop and livestock receipts for 1971 were \$1.4 billion (1).

Manufacturing has made great gains in Florida and accounts for three times as much total personal income as agriculture. Leading manufacturing industries are food processing, chemicals, paper and products, printing and publishing, electrical and transportation equipment, machinery and metal products (1).

Florida leads the nation in the production of phosphate rock and is second to New York in titanium. The commercial fishing and shell-fishing industries are also very important to the state's total economy (1).

III. POPULATION

Florida's population, as of July 1, 1971, was estimated at 7,025,100; the ninth most populous state in the union. This figure represents an increase of 2.7 percent over 1970. The elderly segment of the population, 65 years and older, represents 1,026,000 of the total population (3). The number of Florida residents greater than 65 years of age has increase 200 percent in the past 20 years. The median age in Florida is 32.2 years compared to the median age of the total United States population which is 28.1 years (4).

During the winter, the influx of tourists causes an increase in the population. Also, the migrant farm workers who follow the Atlantic Coast Migratory Stream during the summer months return to work with the crops during the winter. Florida serves as the home base for approximately 100,000 migrants.

IV. VITAL STATISTICS

Florida showed an increase in number of live births from 115,113 births in 1970 to 116,494 in 1971. Florida's birth rate of 16.6 per 1000 live births is slightly lower than that of the United States which is 17.3 per 1000 live births. Four of the six counties in the region served by the student's supervisor have lower birth rates than the state, while two counties have slightly higher rates (3).

Numbers of deaths reported in Florida for 1971 show an all time high for the 25th consecutive year. The crude death rate, however, remained

the same--10.9 in both 1970 and in 1971 in Florida as compared to 9.3 for the United States as a whole. Florida's high percentage of elderly people has kept the death rate higher than the national average. The three counties in the region served which have higher death rates than the state or national average - Collier, Lee, and Sarasota - all have a large segment of their population in the elderly age range. Using age adjusted death rates standardized with the United States population in 1940, the Florida death rate drops from 10.9 to 6.9 (3).

Infant mortality rate in Florida during 1971 was 20.7 per 1000 live births for a total of 2,048 infant deaths. This was a record low. However, all six counties in the region studied had higher infant mortality rates than the state (3). The higher infant mortality rate noted among the rural nonwhite population in four of the six counties served probably results from a combination of low income and inaccessability to medical services. The birth rates, crude death rates, and infant death rates for Florida residents and the six county area are compared with rates for the United States in Table 1.

The ten leading causes of death in the state may also indicate health needs and priorities. The ten leading causes of death in the United States, Florida, and the six county region are listed in Table 2. As can be seen from the table, all counties except Glades County follow the state trend for the first four leading causes of death. The other six causes of death in the counties are inconsistent with state trends.

TABLE -1

THE RESIDENT BIRTH, CRUDE DEATH RATES PER 1,000 POPULATION, AND INFANT DEATH RATE PER 1,000 LIVE BIRTHS, BY RACE, FOR THE UNITED STATES, FLORIDA, AND THE SIX COUNTY REGION IN 1971.

Resident Rates	Place							
	U.S.	Florida	Broward	Collier	Glades	County Hendry	Lee	Sarasota
Birth Rate	17.3*	16.6	14.7	19.4	14.7	23.3	15.3	11.6
White		14.6	12.9	18.6	11.9	20.1	13.1	10.0
Nonwhite		27.2	30.2	28.3	21.8	33.3	32.8	33.6
Death Rate	9.3*	10.9	5.7	11.8	7.9	8.9	11.7	16.6
White		11.1	5.7	10.6	8.1	8.2	11.6	17.0
Nonwhite		9.8	6.2	18.0	7.3	11.0	11.9	12.2
Infant Death Rate(est.)	19.2*	20.7	21.7	30.3	53.6**	52.3	24.7	24.7
White		17.1	16.4	28.9	62.5**	53.5	21.3	17.1
Nonwhite		30.9	36.6	40.4	41.7**	50.0	35.5	54.8

*Preliminary data, race unavailable.

**Based on less than 100 live births which limits the significance of the rate.

Sources: National Center for Health Statistics 1972 Monthly Vital Statistics Report, Annual Summary for the U.S., 1971. U.S. Department of Health, Education, and Welfare, Public Health Services, Rockville, Maryland: Division of Health Statistics, 1971. Florida Vital Statistics 1971 Department of Health and Rehabilitative Services, State of Florida, Jacksonville, Florida.

TABLE 2

RANK ORDER LISTING OF THE TEN LEADING CAUSES OF DEATH IN THE UNITED STATES, FLORIDA, AND THE SIX COUNTY REGION IN 1971.

Cause of Death	Place							
	U.S.	Florida	Broward	Collier	County Glades	Hendry	Lee	Sarasota
Diseases of the heart	1	1	1	1	1	1	1	1
Malignant neoplasms	2	2	2	2	-	3	2	2
Cerebrovascular disease	3	3	3	4	2	4	3	3
All accidents	4	4	4	3	2	2	4	4
Influenza, pneumonia	5	5	5	10	-	6	8	5
Certain causes of mortality in early infancy	6	7	9	7	4	5	7	-
Diabetes mellitus	7	8	10	10	5	8	9	10
Cirrhosis of the liver	8	9	6	6	-	-	9	8
Arteriosclerosis	9	10	-	-	-	-	-	-
Bronchitis, emphysema, asthma	10	6	7	8	5	-	5	7

Sources: National Center for Health Statistics 1972 Monthly Vital Statistics Report, Annual Summary for the U.S., 1971. U.S. Department of Health, Education, and Welfare, Public Health Services, Rockville, Maryland; Division of Health 1971 Florida Vital Statistics 1971. Department of Health and Rehabilitative Services, State of Florida, Jacksonville, Florida.

Interesting to note is that accidents are the second leading cause of death in rural Glades and Hendry counties. Also, in these two counties, mortality in early infancy is more common than in Florida as a whole.

CHAPTER III

DEVELOPMENT OF FLORIDA'S PUBLIC HEALTH PROGRAM

I. HISTORY

The conception of the Florida State Board of Health was a direct result of the Jacksonville yellow fever epidemic of 1888. Due to the total disruption of normal activities and the tremendous problem of providing relief through medical and nursing care following the epidemic, the governor called the legislature into special session to create a State Board of Health (5).

Dramatic changes in Florida and its population have been evident during the relatively short history of the State Board of Health. It has grown rapidly and has greatly expanded the scope of services offered in keeping with the demands of an ever increasing population.

On reorganization of state government in 1969, many authorities of the State Board of Health were transferred to the newly formed Division of Health of the Department of Health and Rehabilitative Services (6). Other divisions under the Department include the Divisions of Administrative Services, Planning and Evaluation, Corrections, Youth Services, Mental Health, Retardation, Vocational Rehabilitation, and Family Services. An organization chart of the Department of Health and Rehabilitative Services is shown in Figure 2.

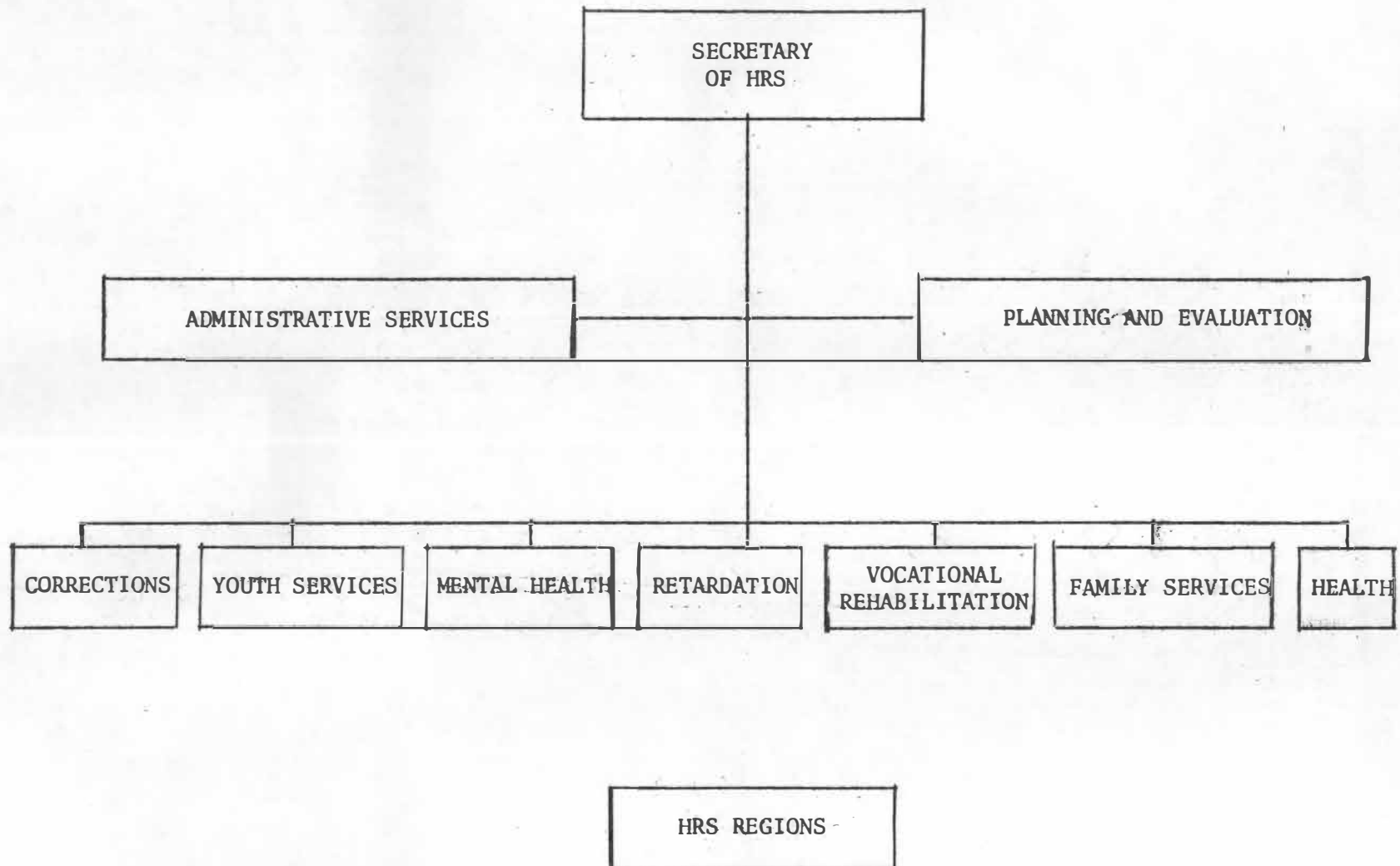


Figure 2. Department of Health and Rehabilitative Services (HRS) Organizational Chart

II. ORGANIZATION

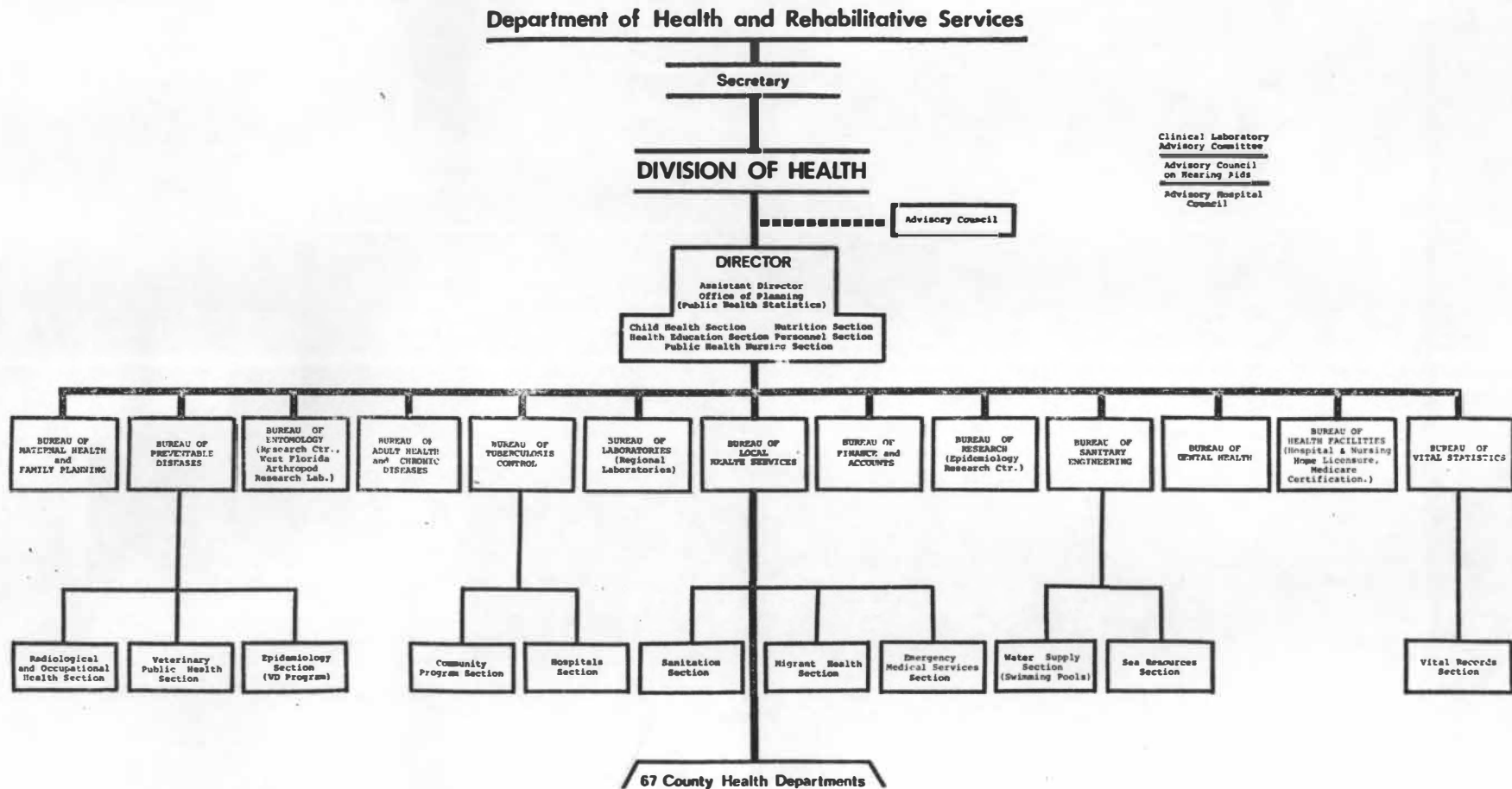
The Division of Health is administered by a Director who is appointed by the governor. The Division is divided into thirteen Bureaus which are established by legislative authority and five Sections which are established by the Director of the Division of Health. Figure 3 shows an organization chart of the Division of Health.

The health services and programs developed to meet the needs of the population served are well-organized and effective in the state of Florida. A summary of some of the Bureaus and Sections within the Division of Health is presented in order to give an idea of the scope of health services offered.

Bureau of Adult Health and Chronic Diseases.

Possibly one of the most pressing needs in Florida is that of services to the elderly. Due to the large number of persons 65 years of age and older, special programs have been developed to meet the needs of these individuals. Perhaps the bureau most closely associated with providing services to the elderly is the Bureau of Adult Health and Chronic Diseases.

Chronic diseases account for the major percentage of deaths in the aging population. Heart disease, cancer, stroke, and diabetes cause three fourths of all Florida deaths (4). The Bureau of Adult Health and Chronic Diseases is divided into three units: Adult Health, Cardiovascular-Renal, and Chronic Diseases. Among the multitude of



Clinical Laboratory
Advisory Committee
Advisory Council
on Hearing Aids
Advisory Hospital
Council

Figure 3. Organization Chart of the Division of Health

services offered through this bureau are: cancer control program, cardiovascular-renal program, diabetes control program, epilepsy program, health care for the aging, hearing aid program, Medical Examiner's Commission, prevention of blindness program, and smoking and health program.

The two programs within the Bureau with which nutritionists work most closely are the diabetes control program and the cardiovascular-renal program. Nutritionists have worked closely with the diabetes control program in diet counseling with diabetic patients and their families, in conducting diabetes education programs, and in publishing materials. A cookbook for diabetics was published cooperatively between the Bureau and the Nutrition Section. Nutritionists also are responsible for a recipe column in the lay diabetic publication "Timely Topics" (7).

There is a specific challenge in working with the cardiovascular-renal program to determine if dietary modifications can reduce the incidence of hypertension, hyperlipidemia, and premature deaths. Nutritionists provide diet counseling to high risk patients on referral from the cardiovascular screening clinics. The nutritionist can be responsible for providing group education classes to parents of children who have been detected as hypertensive (8).

Bureau of Health Facilities.

The Bureau of Health Facilities is also concerned with the aging population, particularly with those in institutional care. This bureau is responsible for the administration of state laws and regulations for the licensure of hospitals, nursing homes, homes for the aged, and homes

for special services. Licensing is also done for institutions applying to receive Medicare and Medicaid. Licensing is done through a team effort of hospital consultant, nurse consultant, and, if possible, nutrition consultant (9).

Nutrition is a built-in part of the Bureau with two positions currently filled for state institutional nutrition consultants who provide program assistance or guidance in food service management and nutritional care to facilities engaged in quantity food service (10).

Bureau of Local Health Services.

A basic need of the total population is for comprehensive health services on the local level. The Bureau of Local Health Services is primarily responsible for serving these needs. Functioning within the Bureau are the Migrant Health Projects, Sanitation Section, Accident Prevention Program, Health Mobilization Projects, Home Health Services, and Emergency Medical Services.

The major responsibility of the Bureau itself is the supervision of the 67 county health departments: their budgets, personnel, programs, and administrative affairs. The specific projects mentioned are coordinated between state and local levels (11).

Migrant Health Project. The migrants provide a special challenge to the health care delivery team due to their superstitious nature, fear, ignorance, frequent shifts in location, lack of transportation, and language barriers. The Migrant Health Projects provide comprehensive

health services to this population. Family health clinics are set up which provide medical, dental, nutritional, health education, and nursing care.

The Migrant Education and Health Project has been developed to provide an early learning experience for pre-school migrant children. These children also receive complete health care through the project (13).

Working with the Migrant Health Project are only two full-time nutritionists, however, nutrition services are provided in all Migrant Project counties by either the regional nutritionist or a county nutritionist. Mrs. Patricia Berry, under whose supervision this field experience took place, serves as Migrant Project Nutrition Coordinator. Consequently, an in-depth look at the role of the nutritionist working with a specific minority group was achieved.

The Migrant Project Nutrition Coordinator provides direct services to the six Migrant Project counties studied in the field experience and serves as consultant to the nutritionists serving Migrant Project counties. Workshops are conducted for community health workers to help them understand the importance of good nutrition in total health care. Migrant Project staffs are provided in-service education to assist them in providing diet counseling when a nutritionist is not present (14).

Direct diet counseling is given to patients on referral from the physician. Many migrants are also reached through nutrition education programs in the clinic waiting rooms. Nutrition programs are presented in cooperation with other agencies such as food stamp offices, self-help

housing groups, and Community Action Migrant groups. Nutritionists have reached migrant children through nutrition education programs in schools, day care centers, and in the migrant camps (14).

The preliminary report of the Florida Migrant Nutrition Survey, completed in 1971, is providing useful information on dietary patterns and nutritional deficiencies prevalent among the migrant population. This information is being shared with all Migrant Project staffs (14).

Sanitation Section. The Sanitation Section is also located under the Bureau of Local Health Services and provides consultation to all county health departments. Currently, one of the major focuses of this section is the improvement of food service. The Nutrition Section and the Sanitation Section work cooperatively in trying to improve the quality of food service offered to the public (15).

Bureau of Maternal Health and Family Planning.

Statistics on maternal and infant deaths, although showing decreasing rates for the state, indicate that there is still a need for extending maternal and child health care. The Bureau of Maternal Health and Family Planning and the Child Health Section are responsible for these activities. The Bureau of Maternal Health and Family Planning works toward providing clinics for the examination and treatment of mothers and their infants. The Bureau is responsible for supervising the five Maternity and Infant Care Projects in the state. Each of these projects within the state employs a nutritionist who is an integral part

of the comprehensive health care team. Some county health departments also conduct maternity and infant care clinics, and any nutrition personnel in the area are utilized to provide consultation, counseling, and nutrition education (16).

Bureau of Dental Health.

The Bureau of Dental Health is responsible for setting up dental clinics within the county health departments. Thirty-three of Florida's 67 counties are presently served by dental clinics. Nutritionists work with the Bureau of Dental Health on the local level where clinics are in operation to provide education to children and parents on proper nutrition and dental care (17).

Child Health Section.

The Child Health Section directs programs to preserve and improve the health of individuals from birth through adolescence. These programs include screening for phenylketonuria, well-child conferences, and school health. Nutritionists work with all facets of child health but most primarily in management and follow-up of cases of phenylketonuria. Consultation is provided to Florida's Children and Youth Projects by either a project nutritionist or by the nutritionist providing services to that geographical area (18).

Public Health Nursing Section.

The Public Health Nursing Section has nurses at the state and regional levels, as well as having at least one county nurse in each of

Florida's county health departments. Over 1200 nurses work under the direction of this Section. Responsibilities of the public health nurse are multi-dimensional. In most instances, the nurse is the health professional known to the community. Therefore, she must be knowledgeable in all areas of public health in order to provide the needed services or to make referrals to the proper agencies (19). The nurse and nutritionist should work closely together so that the nurse can improve her skills in providing diet counseling or disseminating nutrition information when the nutritionist is not present.

Health Education Section.

The primary function of the Health Education Section is to support and complement the other bureaus and sections within the Division of Health. There are three ways in which service is provided: through material production, the operation of a medical library, and an audio-visual library. Health educators serve as consultants and provide help in program planning through the development of media presentations. A wide variety of resource materials and films are available on loan through the medical and audio-visual libraries (20).

Nutritionists work cooperatively with all bureaus and sections within the Division of Health depending on the problem to be solved and the expertise of each bureau and section. Consultation to all units is also provided by nutritionists upon request from the unit.

III. NUTRITION SECTION

History.

Florida's Nutrition Section has progressed greatly since the initiation in 1914 of the state's first nutrition program--an educational program to combat pellagra. Dr. J. Y. Porter, Florida's first State Health Officer, gave instructions to public health physicians and nurses to include dietary information about pellagra in their conferences, talks, and patient contacts (5).

Accompanied by a decline in the prevalence of pellagra was a decrease in emphasis placed on nutrition. Malnourishment and anemia were recognized, but it was not until 1941 that a nutritionist was employed at the state level to work on these problems among Florida's children (5).

Throughout its history, the nutrition component of the Division of Health has undergone several periods of reorganization leading to 1972 when nutrition was removed from the auspices of the Bureau of Local Health Services and established as the Nutrition Section included within the office of the Director of the Division of Health (21).

Objectives.

Stated objectives of the Nutrition Section of the state of Florida are:

1. To promote understanding of the role of nutrition in health maintenance, health protection, and disease control by providing authoritative information on

diet and nutrition to both the public and to public health personnel:

2. To identify nutrition-related health problems existing at the local level.
3. To provide nutrition consultative services and nutrition education services to guide in the development of good food selection habits essential for health maintenance and disease control.
4. To participate in basic and continuing education of public health professionals, educators, and subprofessional health personnel who can disseminate and apply nutrition information.
5. To provide consultation services to group care and day care facilities to help upgrade the quality, palatability, efficiency, and sanitation of food services.
6. To coordinate public health nutritional services with related programs of other state agencies and community groups (22).

Organization.

Florida's Nutrition Section is well organized on three levels: state, regional, and county. Positions at the state level include an Administrator of the Public Health Nutrition Program, two Public Health Nutrition Consultant III's, an Institution Nutritionist Coordinator, and Institution Nutrition Consultants.

The Public Health Nutrition Administrator is responsible for planning and directing the public health nutrition programs for the Division of Health in Florida. Responsibility also includes correlating and integrating the nutrition facet of public health with all other facets of the comprehensive health programs at both state and local levels (23).

The Nutrition Training Coordinator or Public Health Nutrition Consultant III assists the Administrator of Public Health Nutrition with state-wide nutrition program planning. The training coordinator is also responsible for planning and conducting new staff orientation and in-service training programs for the Nutrition Section as well as for supervising field experience for graduate or undergraduate students in nutrition, dietetics, or other health related fields. This position is primarily concerned with coordinating educational and training programs for the Nutrition Section (24).

Assisting the Public Health Nutrition Administrator with planning a particular area of the state-wide nutrition program is the Maternal and Child Health Nutrition Consultant or Nutrition Consultant III. Responsibilities of this position include serving as a state level nutrition coordinator between the Nutrition Section, the Bureau of Maternal Health and Family Planning, and the Child Health Section, and planning, developing, and interpreting the nutrition component of these units. The nutritionist holding this position also provides guidance and training for nutritionists working with Florida's Maternity and Infant Care and Children and Youth Projects (25).

State level Institution Nutrition Consultants serve as liaisons between the Nutrition Section and the Bureau of Health Facilities. These consultants are responsible for evaluating food and nutrition services of hospitals and nursing homes to meet state and federal program standards (i.e., licensure, Medicare). They recruit dietitians to serve as consultants to the facilities and provide guidance to these consultants as well as to administrators and food service personnel of state health facilities (10).

Relatively new within the state is the position of Institution Nutritionist Coordinator. This position holds the responsibility of coordinating nutrition and food service programs in all state institutions. Divisions within the Department of Health and Rehabilitative Services to which service is given include the Divisions of Corrections, Mental Health, Retardation, Youth Services, and Health (26).

Seven Public Health Nutrition Consultant II's are employed within the state. Persons in these positions can function as nutritionists with a large, metropolitan health department, chief nutritionists for a specialized county project, or regional nutrition consultants for a multicounty area. Job responsibilities vary depending on the nature of the positions. However, primary responsibility is planning and directing effective nutrition programs within the area or providing technical consultation to those who actually administer the nutrition programs (23).

The Public Health Nutrition Consultant I is responsible for the nutrition program on a small county level, or for assisting within a specialized county project. Position responsibilities are similar to

those of the Public Health Nutrition Consultant II under whose technical guidance and supervision work is done (23).

Florida has a unique training position at the beginning level known as a nutrition resident or Public Health Nutritionist. This position is assigned by the state to a county interested in initiating a nutrition program on the county level. Salary for the position is paid by the state for one to two years at which time the county is to have the money budgeted to take over salary payment. All work is done by the nutrition resident under the supervision of a Public Health Nutrition Consultant (23).

Ways in which nutritionists provide services to other bureaus and sections within the Division of Health have been discussed earlier in this chapter. In general terms, nutritionists work throughout the state to give assistance in the areas of consultation, in-service education, group classes or demonstrations, diet counseling, program evaluation, and technical guidance in order to insure that the public receives sound, realistic nutrition services (22).

CHAPTER IV

ANALYSIS OF ABILITIES THROUGH OBSERVATION AND PARTICIPATION

To develop a greater understanding and appreciation of the many diverse roles of the public health nutritionist was one of the primary objectives of the field experience. In order to accomplish this, opportunities were provided for observation of the nutritionist functioning in a variety of situations. In addition to observation, participation was deemed necessary for increasing the student's competence as a nutrition professional. An extensive and excellent schedule provided many opportunities for observation and participation during the field experience. Those experiences which were of greatest value for illustrating professional development in the areas of consultation, education, and counseling will be discussed.

I. CONSULTATION

Serving as a consultant to both professional and non-professional persons is a vital part of the nutritionist's responsibilities. The consultant role of the nutritionist was observed on several occasions.

Mrs. Berry, as statewide Migrant Project Nutrition Coordinator, serves as consultant to other nutritionists working with Migrant Projects. One of her consultation visits with Doreen Pryce, Collier-Lee Counties Migrant Project nutritionist will serve to illustrate the consultation role of the nutritionist with a professional person.

Miss Pryce has been employed in her position as a Migrant Project nutritionist since February, 1973. Therefore, she is presently making contacts with local resource people and developing nutrition programs for the counties. Mrs. Berry, as the nutrition coordinator, met with Miss Pryce to discuss possible solutions to current nutrition problems.

Miss Pryce revealed that she has having some difficulty in making contacts and establishing nutrition programs in one of the counties. Mrs. Berry, after listening to the specific problems, was able to make some valuable suggestions. She suggested some resource people with whom Miss Pryce might talk about possible program development. Mrs. Berry also suggested some nutrition activities which could be used within the programs already developed by Miss Pryce.

Several consultation visits to the Community Action Migrant Project day care centers were also observed. In these visits, consultation with non-professional persons was observed.

On a visit to the day care center in Moore Haven, Florida, the nutritionist talked with both the director of the center and with the cook. In talking with the director, the nutritionist sought any nutrition related problems which might be occurring in the center. No problems were cited by the director. The nutritionist then discussed with the director a film on the importance of eating breakfast which might be shown to the children. The director was shown a sample of the film kit and the materials included. She was then given a copy of the address from which she could order the film kit.

The nutritionist also reviewed with the cook some changes which had been made in the menus for the center. These changes, for example, including a wider variety of foods for snacks, had been suggested by the nutritionist on a previous visit.

The student benefited greatly from observing the consultation visits both with professionals and nonprofessionals. It was observed that the consultant must be sympathetic and extremely perceptive in these visits. She must not be judgmental during the consultation visit in order to be effective and to command the respect and trust of the consultee.

The student feels that after observing the consultation visits, she will better be able to effectively perform this role of the nutritionist in her later work experiences.

II. EDUCATION

Several opportunities were offered the student to improve her skill as an educator. These opportunities included participation in an inservice education program for school food service personnel, planning and developing the nutrition segment of a health fair exhibit, and writing a nutrition article for the Sarasota County Health Department newsletter.

At the inservice education program for school food service personnel, the student assumed responsibility for part of the discussion. This responsibility caused the student to realize the importance of considering the needs of the group in program development. Recognizing the size of the group and the varied education levels of the individuals,

the discussion was kept informal and simple and an effort was made to involve the audience. Flip charts were used for emphasis of key points and food models were also used as visual aids.

During the actual presentation of the program the student was able to observe the audience's reactions to the method of presentation and the use of visual aids. The amount of participation and the number of questions asked from the group seemed to evidence the fact that the material was presented in an appropriate manner. This reinforced the student's belief in the value of using visual aids in group teaching situations.

Another means of education is through the use of visual media-- exhibits, displays, etc. Along with the health educator and the dentist of the Sarasota County Health Department, full responsibility was assumed for planning and developing the nutrition segment of a health fair exhibit for a local elementary school.

The development of this exhibit was a valuable learning experience for the student. Several problems were encountered in the development process. The major problem was in selecting a method of communication appropriate for grades K-9. Another problem was in selecting and preparing a learning tool which could be used without direct supervision. In seeking appropriate solutions to these problems, the student increased her realization of the fact that many factors affect the development of effective learning tools.

In final form, the exhibit consisted of a battery powered nutrition quiz which called for matching the correct answer to a set of questions.

The exhibit also featured a "dental roulette" wheel which, when spun landed on a snack food and a picture of a good or bad tooth depending on the nutritional value and caries producing effect of the snack.

Perhaps the most valuable thing learned in preparing the exhibit was the importance of establishing good working relationships with other health professionals. Good interprofessional teamwork is a key to effective total health education.

A final opportunity for increasing the student's educational skills was involved with writing a nutrition article for the Sarasota County Health Department newsletter. In writing this article, the student was able to increase her skill in preparing nutrition education material for use in one of the mass media. Effective use of all forms of mass media is an important means of educating the public.

The student, in developing the news article, realized the importance of stating the material clearly and simply. This is important because in using mass media there is no chance to interpret what one means if the reader does not understand. The student also recognized the importance of writing in a brief but interesting manner so as to attract the attention of the reader.

The student has greatly improved her skill as an educator in teaching group classes, preparing exhibits, and writing news articles. The importance of constantly improving her skill as an educator in public health nutrition is recognized by the student.

III. COUNSELING

The student both observed and participated in counseling sessions during the field experience. Counseling occurred in clinics on referral from the physician, in clinic waiting rooms with no physician referral, and in the nutritionist's office. Both normal nutrition counseling and therapeutic diet counseling were done by the nutritionist and by the student.

Therapeutic diet counseling sessions were observed on several occasions. This type of counseling was familiar to the student from previous experience. In all therapeutic diet counseling sessions, the process used by the nutritionist was similar.

Patients requiring therapeutic diets were usually referred by a physician in a clinic situation. Upon receiving a referral the nutritionist first reviewed the patient's chart. Then the patient was brought in for counseling. In the counseling sessions the patient was told why he was being placed on a diet and how this diet would help in the treatment of his disease. Specific diet instructions were then given.

The student, while observing the nutritionist in these counseling sessions, recognized several important characteristics of the counselor. She must have a thorough understanding of the patient's history in order to plan and give effective diet instructions. The patient history is obtained from reading the patient's chart as well as from questioning the patient. The nutritionist was also observed to adapt her method of speaking to the patient depending on the educational level, age, and

ethnic group of the patient. For example, most of the patients counseled during the field experience were Spanish-American or black migrants with little education. Therefore counseling had to be done in a simple, often pictorial manner, for complete understanding by the patient.

Observation of the nutritionist in therapeutic diet counseling sessions reinforced several beliefs the student had acquired in previous experiences. These beliefs include the importance of being familiar with the patient's history in order to effectively participate in comprehensive health care. It also is important to counsel each patient as an individual, taking into consideration all aspects of the patient's situation.

Although the practice of therapeutic diet counseling was familiar to the student, the practice of doing normal nutrition counseling in clinic waiting rooms was a new experience. This type of counseling was done by both the nutritionist and by the student when physician referrals were not plentiful.

Normal nutrition counseling was done on both an individual and a group basis, depending on the nature and apparent needs of the group. On one occasion the student observed the nutritionist talk with a group of migrant patients about economy food buying. Another group talk given to mothers in one clinic concerned the subject of general family nutrition.

The student participated in normal nutrition counseling by talking with mothers of small children on infant and child feeding, and with individuals in the clinic waiting rooms about general family nutrition.

In each case, the student talked briefly with the patients then gave each one appropriate visual materials about good nutrition.

The student feels that much was learned from participating in this type of counseling. Although the experience was a new one for the student, it is felt that this type of counseling is very important in providing complete nutritional care for the populations served. The experience helped the student to gain greater confidence in her abilities to speak on the subject of nutrition in an informal, impromptu situation.

IV. GROUP CLASSES FOR OLDER ADULTS

Recognition of the fact that older adults provide a special challenge for nutrition education and that the student had previously done little work with them led to the selection of a special project involving this age group. The specific activity consisted of teaching two nutrition classes in a series of ten being held in an apartment complex for the elderly in Sarasota, Florida.

Background.

The same conditions that contribute to malnutrition and undernutrition among all age groups in our society are common to the elderly, whose nutritional problems are complicated by the various changes that people undergo as they grow older (27). Acknowledgment was made of the fact that a perceptive look at the multitude of problems facing the older adult must be made in order to effectively work with this group.

Nutrition education is an important aspect of improving the lives of older Americans. According to Pelcovits in the article Nutrition for Older Americans, an effective educational program must be based on the realities of their life situations. These situations are the amount of money they have to spend on food, their lifelong food habits, their physical condition and degree of dependence on others, their housing arrangements, availability of equipment for food storage and preparation, and accessibility to supermarkets (27).

Planning.

In order to plan effectively for the nutrition classes for older adults it was necessary to schedule conferences with area resource people who were already interested and involved in working with the elderly. Throughout the state of Florida local volunteer, non-profit Councils on Aging have been established to develop and coordinate programs and activities for older adults. These local Councils are affiliates of the Florida Council on Aging which functions cooperatively with the Division of Family Services' Bureau of Aging.

Dr. Samuel Greenberg, President of the Sarasota Council on Aging, was an excellent resource person. According to Dr. Greenberg, older adults are a high risk group, nutritionally speaking, for four main reasons: financial difficulties, lack of interest because of isolation or lack of transportation, ignorance about what to buy or to eat, and chronic diseases (28). Any one of these factors, or perhaps a combination of factors, results in inadequate nutrition for many older adults.

One of the functions of the Sarasota Council on Aging is to provide nutrition education classes for groups of these elderly people. The classes were initiated by the Council's Institute of Learning through the Adult Vocational Education Program.

The conference with Dr. Greenberg was of great value to the student in providing her with an insight into working with the elderly. After the conference, the student felt that she better understood the many problems of the older adult and would, therefore, be able to work more effectively with them.

Mrs. Kathryne Hughes was the teacher of the nutrition classes for the Sarasota Adult Vocational Education Program. In a planning conference with Mrs. Hughes, she explained that an on-going series of ten nutrition classes was being held in a Sarasota apartment complex for the elderly (29). The student was given the responsibility of teaching two of these classes.

Mrs. Hughes provided information about the early classes and the format and method of presentation she had used which had been most effective. This information was very valuable in the student's planning of her classes. In talking with Mrs. Hughes, the student also obtained valuable background knowledge of the particular group attending the classes. This, too, was beneficial to the student in her program development.

Conferences were held with several other resource people in other cities to expand the student's knowledge of services provided to the

elderly. Rev. Ray Schember, President of the Lee County Council on Aging, discussed his Council's functions. No nutrition services, as such, are provided by this Council. Services which are provided by the Council include a telephone reassurance program and a series of classes on all aspects of retirement and aging (30).

The conference with Rev. Schember provided the student with an opportunity to discuss various services, other than nutrition, provided to the elderly. This was a valuable experience for broadening the student's knowledge about priority needs of the elderly and the lack of nutrition's place among these priority needs as seen by one Council on Aging. The student, following the conference, was able to visualize the greater impact of the program if nutrition services were added.

Mrs. Carolyn Bishop, coordinator of the Lee County Meals on Wheels Project, discussed this area of nutrition service which is available to the elderly. The Lee County project is locally sponsored and receives no federal support, therefore, it is too small to serve the larger number of people who need the service (31).

A conference was also had with Mrs. Lois Jones, an adult vocational home economics teacher in Venice, Florida. Mrs. Jones teaches nutrition classes in a mobile home park in Venice. These classes are provided through the Adult Vocational Education Program. One of Mrs. Jones classes was observed in preparation for the classes to be taught by the student.

The student benefited greatly from observing the class conducted by Mrs. Jones. A film which was shown at the beginning of the class

received much comment from those attending and appeared to have been enjoyed by all. This reinforced the student's belief that the use of audio-visual aids is of valuable assistance in teaching the elderly.

Development.

Although topics for the two classes to be taught were assigned, responsibility was assumed for the development of materials and the method of presentation. Development of both class presentations will be discussed.

The student profited greatly from assuming responsibility for program development. Since teaching the elderly was a new experience, the student, while preparing for the classes, gained valuable knowledge about this age group. She also improved her skills in effective program planning for short term projects. Being entirely responsible for the material to be presented to the class gave the student a sense of self-importance and professionalism.

The first class topic to be taught was Food and Special Needs of the Older Adult. A discussion of the B vitamins and Vitamin E was also scheduled for the class.

Objectives developed for the class were:

1. To review basic concepts of nutrient needs of older adults.
2. To discuss physiological and social changes which may affect eating habits of older adults.

3. To provide suggestions for coping with each of these changes which may occur.
4. To present factual information about the vitamins-- functions in the body, recommended dietary allowances, deficiency symptoms, and sources of the vitamins.

Food Borne Illnesses and Safe Care of Food was the topic for discussion during the second class session. Objectives for this class were:

1. To discuss the most common types of food-borne illnesses.
2. To review steps to be taken if one suspects a food-borne illness resulted from eating in a commercial eating establishment.
3. To discuss safe methods of food preparation and storage.

Materials were collected and read from the regional nutritionist's files, from an outline for teaching older adults developed by the Nutrition Section, and from Ronald Deutsch's book The Family Guide to Better Food and Better Health. The lesson outline developed by the Nutrition Section was the basic tool used in preparing for both classes.

An expansion of knowledge was obtained from the readings and research into the subject of nutrition for the older adult. The book by Ronald Deutsch was especially enjoyed by the student. This reference provided sound nutrition information in an interesting manner for easy interpretation to older adults. The book also gave numerous illustrative

examples which the student felt were excellent for use in teaching the elderly.

For the session which included a discussion of the vitamins, handouts were prepared for each person in the class. This type of aid had been used by Mrs. Hughes in previous classes and had been well accepted. The handouts, one on the B vitamins and one on vitamin E, discussed the vitamin, how it functions in the body, recommended dietary allowances, deficiency symptoms, and good sources of the vitamins.

In preparing the handouts, the student improved her journalistic skills. The material had to be presented in a concise, simply written manner for easy comprehension by the older adults. The student learned to pick from the literature the essential facts about the vitamins, to state the facts simply, and to present simple explanations of these facts.

Several factors influenced the choice of method of presentation. It was felt that an informal type situation was the most desirable for small group presentations. A great number of the elderly people living in Sarasota have retired to the area from many different locations throughout the United States. Consequently, there were many differences in accustomed food patterns as well as differences in economic and educational backgrounds. A group discussion type class seemed most appropriate so that each person attending could contribute her comments as well as benefit from the varied experiences of others in the class.

In the development of plans for the class, methods of evaluation to be used for measuring success were considered. It was recognized that due to the two hour time limit for the classes, no written evaluation could be done at each class. Consequently, most of the evaluation was to be done subjectively.

Participation.

Classes were conducted at the Jefferson Center apartment complex in Sarasota, Florida, on April 25 and May 9, 1973. Approximately fifteen older adults attended each class. The very informal group discussion method of presentation was used in both classes. In order to start the discussions, factual information was given in simple terms about the given topic. Then involvement questions were asked to stimulate thought and to provoke discussion. For example, in the second class, facts were given about how food-borne illnesses occur and then the class was asked what could be done in the home to help prevent the occurrence of these illnesses.

Two important points were recognized in teaching these older adults. The amount of material to be covered should not be extensive because the teacher must speak slowly and leave time for thought and questions. Older adults react more slowly and adequate time must be given for thought if complete comprehension is desired. Also, material must be presented in a simple language because in most groups of older adults there will be varied educational backgrounds.

The material to be presented in both classes was organized according to priority. Consequently, the most important areas were discussed first. This was done so that if cuts in the program had to be made, the most important material would have already been discussed. In both classes, adjustments in the amount of material to be covered had to be made because of the number of questions asked.

Evaluation.

Several subjective means were used in evaluation. The number of questions asked and the lively discussions evidenced the fact that the group discussion approach was an appropriate method of presentation. The materials presented provoked much comment and apparently stimulated the individuals attending to reevaluate some of their currently held concepts about nutrition.

The student felt that the class members were very interested in nutrition and were eager to be well-informed. As was requested at the start of both classes, the women interrupted whenever they had a question or comment. This was done because many older adults will forget what they wanted to ask by the end of the class.

Several times the student was amazed at the sound knowledge of nutrition the group exhibited. However, several misconceptions about nutrition were also voiced. Most of these misconceptions concerned vitamins and health foods. The fact that both good and bad concepts of nutrition were voiced by the class members evidenced the fact that both reliable and unreliable sources of nutrition information were being read by the group.

The instances when misconceptions were brought up afforded the student with an opportunity to present factual information on the matter in question and to stimulate those in the class to evaluate and determine the most sound answer.

At times, the student was not familiar with the matter questioned. For example, one question regarded a certain article in a current magazine which the student had not read. When this occurred the student had to reply "I don't know." The reason for not answering was then explained along with assurance being given to the class that the article would be checked. The ability and willingness to say "I don't know" is considered by the student to be a highly desirable trait of a professional. The student learned from this experience that as a professional she must recognize her limitations and be willing to admit these limitations to those with whom she works.

In addition to the positive way in which the student felt the group responded to her, it was felt that the women in the class responded well to each other. Conversations between class members and general discussions involving the entire group evidenced the enthusiasm with which the group discussed nutrition.

Mrs. Hughes, the teacher, and Mrs. Berry, the supervisor and regional nutrition consultant, agreed that the materials for the classes were well organized and the enthusiasm of the student provided interesting classes. The approval and praise given the student by these two nutrition professionals caused her to feel a sense of real accomplishment. One of the older adults remarked of the student after the second

class, "She talks like she really believes what she's saying." This statement in itself provided the student with a real sense of achievement.

CHAPTER V

SUMMARY AND EVALUATION

The field experience in Public Health Nutrition strengthened the student's knowledge of the many dimensions of public health and the role of the nutritionist in relation to other disciplines in the field. Through the careful planning of the field agency, opportunities for observation and participation allowed the student to accomplish specific objectives during the field experience.

Conferences and interviews with public health professionals in the fields of adult health and chronic diseases, health facilities, local health services, migrant health, sanitation, maternal health and family planning, dental health, child health, public health nursing, and health education increased the student's understanding of the total public health organization. Discussions with nutrition professionals clarified the student's understanding of the role of the nutritionist in the coordinated efforts of an overall public health program.

Working under the supervision of the Migrant Project Nutrition Coordinator provided the student with an opportunity to improve her skill in working with the migrant population. This was a valuable opportunity for the student because of her interest in working with this population after the completion of her education.

Observation and participation increased the student's competence in consultation, education, and counseling. Skills were improved in

developing programs for different types of groups and in establishing rapport with patients. It is felt that these skills are most important to the public health nutritionist.

The overall field experience showed the student that flexibility, cooperation, planning, and evaluation are key principles in public health. These principles will be put to use in future work experiences in public health.

The student believes that her professional development was greatly enhanced through this field experience. It was an excellent supplement to her academic background and it provided an opportunity for the student to further develop her own personal philosophy of public health and the role of the nutritionist in relation to other disciplines in the field.

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VITA

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At the University of Tennessee, she was chairman of the U.T. Student Member Section of the American Home Economics Association, an officer of Chi Omega Fraternity, and an officer of the University of Tennessee Panhellenic Council. In December, 1972, she received the Bachelor of Science degree in Nutrition.

In January of 1973 she began graduate study in Nutrition and Public Health Education. She received the Master of Science degree in December, 1973.